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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22801

7590

05/24/2004

LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201 EXAMINER

TO, BAOQUOC N

ART UNIT PAPER NUMBER

2172

DATE MAILED: 05/24/2004

13

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,288	10/30/2000	Wen-Yin Liu	MS1-605US	1430

TITLE OF INVENTION: SEMI-AUTOMATIC ANNOTATION OF MULTIMEDIA OBJECTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	08/24/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

Let issue fee and publication fee (if required) must be paid within <u>three months</u> from the mailing date of this notice or this application shall be regarded as abandoned. <u>This statutory period cannot be extended.</u> See 35 u.s.c. 151. The issue fee due indicated above reflects a credit for any previously paid issue fee applied in this application. The ptol-85B (or an equivalent) must be returned within this period even if no fee is due or the application will be regarded as abandoned.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status.
 See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

W.

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u>

(703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

maintenance fee notification	ns.			<u> </u>	; and/or (b) indicating a sepa		
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
	590 05/24/2004			have its own certificat	te of mailing or transmission.		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201				Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.			
						(Depositor's name)	
•						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE	FIR	ST NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/702,288	10/30/2000		Wen-Yin Liu		MS1-605US	1430	
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE	Pt	JBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
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Address form PTO/SB/1  "Fee Address" indicate PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AND PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN  Please check the appropriate	ion (or "Fee Address" Indica or more recent) attached. Us D RESIDENCE DATA TO B an assignee is identified be ed to the USPTO or is being s IEE	correspondence tion form e of a Customer E PRINTED ON THE low, no assignee data submitted under separa (B) R	agents OR, altern firm (having as a agent) and the na attorneys or agen will be printed.  E PATENT (print of will appear on the ate cover. Complete ESIDENCE: (CIT aged on the patent);	patent. Inclusion of a ion of this form is NO Y and STATE OR CC	of a single attorney or 2 tered patent ed, no name 3 assignee data is only appropri T a substitute for filing an ass		
4a. The following fee(s) are	enclosed:		ayment of Fee(s):	. 64 6 ()			
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Director for Patents is reque	ested to apply the Issue Fee a		eposit Account Nu any) or to re-apply		issue fee to the application ide		
(Authorized Signature)		(Date)		<u> </u>			
other than the applicant; interest as shown by the re This collection of informa obtain or retain a benefit application. Confidentialit estimated to take 12 minu completed application for	d Publication Fee (if require a registered attorney or agreed of the United States Pation is required by 37 CFR by the public which is to fy is governed by 35 U.S.C. lites to complete, including gen to the USPTO. Time with the amount of time you this burden, should be sent	ent; or the assignee of atent and Trademark C 1.311. The informati- ile (and by the USPT .22 and 37 CFR 1.14. athering, preparing, ar ll vary depending upo	or other party in office.  ion is required to O to process) an This collection is not submitting the on the individual				
Patent and Trademark ( 22313-1450. DO NOT S SEND TO: Commissioner	this burden, should be sent Office, U.S. Department SEND FEES OR COMPLE for Patents, Alexandria, Virgeduction Act of 1995, no Juness it displays a valid OM	of Commerce, Alex TED FORMS TO T ginia 22313-1450.	tandria, Virginia HIS ADDRESS.				



# United States Patent and Trademark Office

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09/702,288	10/30	0/2000	Wen-Yin Liu	MS1-605US 1430		
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SPOKANE, WA 99201				ART UNIT	PAPER NUMBER	
				2172		
			DATE MAILED: 05/24/2004			

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 234 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 234 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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·	Application No.	Applicant(s)	1
Notice of Allowability	09/702,288	LIU ET AL.	
Notice of Allowability	Examiner	Art Unit	12/7
	Baoquoc N To	2172	PP
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in ) or other appropriate commining RIGHTS. This application is s	n this application. If not inclu unication will be mailed in du	uded ue course. <b>THIS</b>
1. This communication is responsive to <u>05/13/04</u> .			
2. X The allowed claim(s) is/are 1.5-14.16-20.22-24.32-38 and	<u>142</u> .		
3. $igspace$ The drawings filed on <u>10/30/00</u> are accepted by the Exam	niner.		
4.	e been received. The been received in Application occuments have been received of this communication to file MENT of this application.  The series of this application of the series of the submitted of the submitted of the series of the submitted of the series of the submitted o	on No d in this national stage appli a reply complying with the AMINER'S AMENDMENT or declaration is deficient.  V ( PTO-948) attached in the Office action of the drawings in the front (not to R 1.121(d). ERIAL must be submitted	requirements r NOTICE OF
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview So Paper No./ 08), 7. ☒ Examiner's	formal Patent Application (Pummary (PTO-413), Mail Date Amendment/Comment  Statement of Reasons for A  JEAN M. CORRIEL  JEAN M. CORRIEL  PRIMARY EXAMIN	Ilowance

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### **DETAILED ACTION**

1. Claims 1-42 are in this application and claims 2-5, 15, 21, 25-31 and 39-41 are canceled by the examiner amendment. 1, 5-14, 16-20, 22-24, 32-38 and 42 are pending this application.

#### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with May on May 13, 2004.

Please cancel these claims 2-5, 15, 21, 25-31 and 39-41.

Please cancel claim [1], replace with 1. A method comprising:

identifying, in response to a search query, first multimedia objects having an associated keyword that matches a keyword in the search query, and identifying second multimedia objects that have content features similar to those of the first multimedia objects, wherein the content features do not match the keyword in the search query;

presenting the first and second multimedia objects to a user;

monitoring feedback from the user as to which of the first and second multimedia objects are relevant to the search query;

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maintaining associations between the keywords and the multimedia objects, the associations being weighted to indicate how relevant the keywords are to the multimedia objects;

adjusting the weights of the associations based on the user's feedback, wherein the adjusting comprises increasing a weight of an association between the keyword and a particular multimedia object that is deemed relevant by the user or/and decreasing a weight of an association between the keyword and a particular multimedia object that is deemed irrelevant by the user; and

annotating one or more of the second multimedia objects, which are deemed relevant by the user, with the keyword."

Please delete claim [10], replace with '10. A method comprising:

identifying, in response to a search query, first multimedia objects having an associated keyword that matches a keyword in the search query, and identifying second multimedia objects that have content features similar to those of the first multimedia objects, wherein the content features do not match the keyword in the search query;

presenting the first and second multimedia objects to a user;
monitoring feedback from the user as to which of the first and second multimedia
objects are relevant to the search query;

maintaining associations between the keywords and the multimedia objects, the associations being weighted to indicate how relevant the keywords are to the multimedia objects;



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Art Unit; 2172

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adjusting the weights of the associations based on the user's feedback, wherein the adjusting comprises increasing a weight of an association between the keyword and a particular multimedia object that is deemed relevant by the user or/and decreasing a weight of an association between the keyword and a particular multimedia object that is deemed irrelevant by the user; and

annotating one or more of the second multimedia objects, which are deemed relevant by the user, with the keyword."

Please delete claim [18], replace with "18. A method comprising:

identifying, in response to a search query, first multimedia objects having an associated keyword that matches a keyword in the search query, and identifying second multimedia objects that have content features similar to those of the first multimedia objects, wherein the content features do not match the keyword in the search query;

presenting the first and second multimedia objects to a user;

monitoring feedback from the user as to which of the multimedia objects are relevant;

annotating one or more of the multimedia objects based on the user's feedback, with a keyword;

in an event that a particular multimedia object is deemed relevant by the user and not yet annotated with the keyword, adding the keyword to the particular multimedia object; and

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in an event that the particular multimedia object is deemed relevant by the user and is already annotated with the keyword, strengthening an association between the keyword and the particular multimedia object."

Please delete claim [32], replace with 32. A system comprising:

an information retrieval unit to retrieve multimedia objects from a database based on a search query first multimedia objects having an associated keyword that matches a keyword in the search query, and identifying second multimedia objects that have content features similar to those of the first multimedia objects wherein the content features do not match the keyword in the search query;

a relevance feedback unit to capture a user's feedback as to whether the multimedia objects are relevant to the search query; and

an annotation unit to annotate, with the keyword, the second multimedia objects based on the user's feedback,

wherein the search query comprises a keyword-based search query having at least one keyword and in an event that a particular multimedia object is deemed relevant by the user and is already annotated with the keyword, the annotation unit strengthens an association between the keyword and the particular multimedia object, and/or in an event that a particular multimedia object is deemed irrelevant by the user and is already annotated with the keyword, removing the keyword from the particular multimedia object, and/or in an event that a particular multimedia object is deemed irrelevant by the user and is already annotated with the keyword, weakening an association between the keyword and the particular multimedia object."

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# Allowable Subject Matter

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3. Claims 1, 5-14, 16-20, 22-24, 32-38 and 42 are allowed over prior art made of record.

The following is an examiner's statement of reasons for allowance: None of the non prior art alone or incombination neither teaches nor suggest "identifying, in response to a search query, first multimedia objects having an associated keyword that matches a keyword in the search query, and identifying second multimedia objects that have content features similar to those of the first multimedia objects, wherein the content features do not match the keyword in the search query;

presenting the first and second multimedia objects to a user;

monitoring feedback from the user as to which of the first and second multimedia objects are relevant to the search query;

maintaining associations between the keywords and the multimedia objects, the associations being weighted to indicate how relevant the keywords are to the multimedia objects;

adjusting the weights of the associations based on the user's feedback, wherein the adjusting comprises increasing a weight of an association between the keyword and a particular multimedia object that is deemed relevant by the user or/and decreasing a weight of an association between the keyword and a particular multimedia object that is deemed irrelevant by the user; and

annotating one or more of the second multimedia objects, which are deemed relevant by the user, with the keyword."

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aggarwal et al. (US. Patent No. 6,728,706 B2)

Patent date: 06/03/2003

Fox et al. (US. Patent No. 6,574,632 B2)

Patent date: 03/03/2003

Shevade et al., "an experiental annotation system", Year 2003, ISBA:1-508113, page 91-98.

Lai et al., "PBIR-MM: multimodal image retrieval and annotation", Year 2002, ISBN: 1-58113-620-X, page 421-422.

### **Contact information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail Baoquoc N. To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at (703) 305-9790.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(703) 872-9306 [Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To May 13, 2004

JEAN M. CORRIELUS PRIMARY EXAMINER